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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,738	07/16/2003	Alexander Kravtchenko	PD020078	9052

7590 04/04/2006

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EXAMINER

CHAUDRY, MUJTABA M

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/620,738	Applicant(s) KRAVTCHENKO ET AL.	
	Examiner Mujtaba K. Chaudry	Art Unit 2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 5-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/16/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-15 are presented for examination.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on July 16, 2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered.

Oath/Declaration

The Oath filed July 16, 2003 complies with all the requirements set forth in MPEP 602 and therefore is accepted.

Drawings

The drawings are objected to because:

- Figure 2 does not show any input(s)/output(s) links for D2, M2 and M3.
- Figure 3 does not show any input(s)/output(s) links for M1 and D1.

Appropriate correction is required.

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Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title or claim(s). It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it is not in a single paragraph.

On page 1 of the specification, the title should appear on top of page prior to "field of invention".

See 37 CFR 1.77(b).

Claim Objections

Claim 7 objected to because of the following informalities:

- In line 4, insert "a" prior to "...third memory means..."

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 13 is rejected under 35 U.S.C. 101 because the language of the claim raises a questions as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 USC 101. For example, claim 13 recites a “computer program product” which is not defined in the specification and depends from a method claim. Applicants are advised to either cancel claim 13 or amend it to overcome rejections under 35 USC 101 and 112.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 recites a “computer program product” and depends on method claim 1. It is not clear if applicants intended claim 13 to be independent. If claim 13 is to be dependent, then applicants are reminded that a product and process in the same claim is improper. See MPEP 2173.05(p) and In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990). As such the claim will not be examined on the merits.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as

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the invention. Claim 14 recites a “Reed-Solomon decoder” and depends on method claim 1. It is not clear if applicants intended claim 14 to be independent. If claim 14 is to be dependent, then applicants are reminded that a product and process in the same claim is improper. See MPEP 2173.05(p) and In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990). As such the claim will not be examined on the merits. Furthermore, Claim 14 recites a Reed-Solomon decoder without mentioning what it comprises or how it carries out the correction process. Essential elements are missing.

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 15 recites a “audio or video device” and depends on method claim 1. It is not clear if applicants intended claim 15 to be independent. If claim 15 is to be dependent, then applicants are reminded that a product and process in the same claim is improper. See MPEP 2173.05(p) and In *Ex parte Lyell*, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990). As such the claim will not be examined on the merits.

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites “for example” in line 1. This language is not proper in the claim. See MPEP 2173.05(d).

Appropriate correction is required.

Allowable Subject Matter

Claims 5-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including any all of the limitations of the base claim and any intervening claims. Dependent claims 5-12 recite limitations that are neither disclosed nor obvious over the prior arts of record. The minor objection to dependent claim 7 would also need to be satisfied as stated in claim objections.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

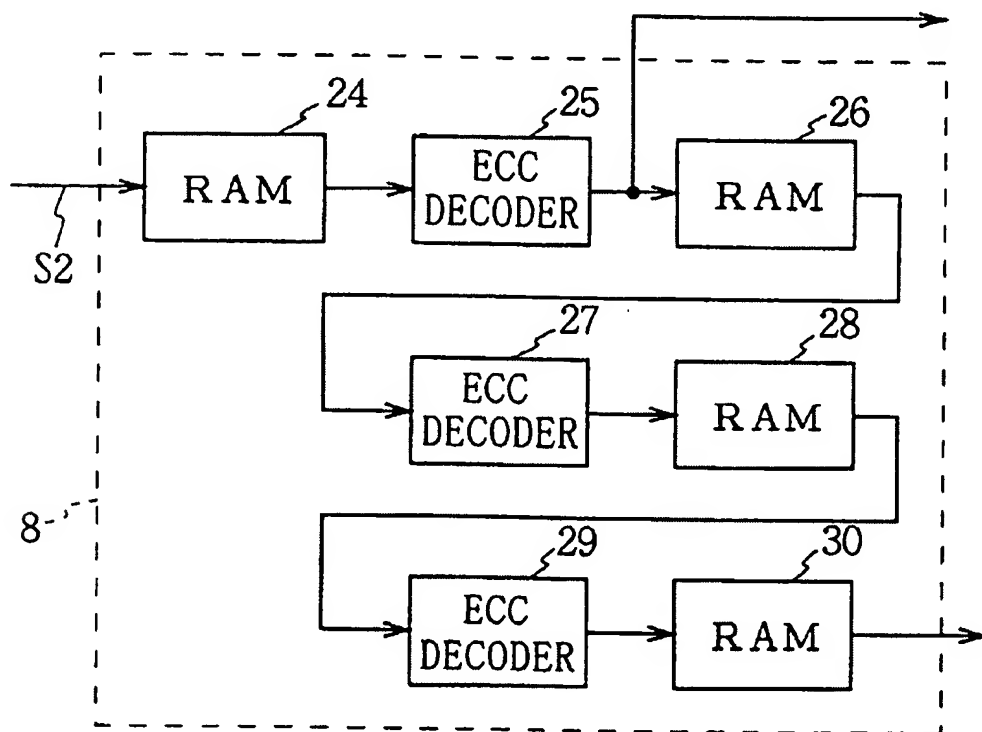
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 is rejected under 35 U.S.C. 102(b) as being anticipated by Ichikawa (USPN 5901159).

As per claim 1, Ichikawa teaches (abstract) digital signal decoder which decodes coded data, for example, a coded digital video signal, that has error-correcting data such as C1/C2 convolutional Reed-Solomon type data added thereto. The decoder stores in a memory the coded data, detects correctable errors in the stored coded data, ascertains positions of the detected errors in the coded data, and supplies error correction patterns that correspond to those errors. A second memory stores the ascertained positions of the errors as well as the error correction patterns, and coded data that correspond to the positions of the errors are read from the first memory and decoded by using the error correction patterns stored in the second memory

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so as to produce corrected decoded data. A digital signal reproducing apparatus embodying the above decoder also is disclosed. Ichikawa teaches (Figure 2) inputting a first C1 codeword into a ECC decoder (analogous to C1 decoder) from a first memory. The output of the first ECC decoder is written to a second memory as stated in the present application. The Examiner would like to point out that Ichikawa teaches (cols. 2-3) deinterleaving.



As per claim 2, Ichikawa teaches (col. 2, lines 35-40 and Figure 2) that decoders 25, 27 and 29 detect and correct errors. If there are uncorrectable error(s) it is sent to the next decoder.

As per claim 3, Ichikawa teaches (col. 2, lines 65-68) to generate error flags for uncorrectable errors.

As per claim 4, Ichikawa teaches (Figure 2) to input a first C2 codeword from RAM 26 to decoder 27 and outputting a second codeword.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Additional pertinent prior arts are included herein for Applicant's review.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mujtaba K. Chaudry whose telephone number is 571-272-3817.

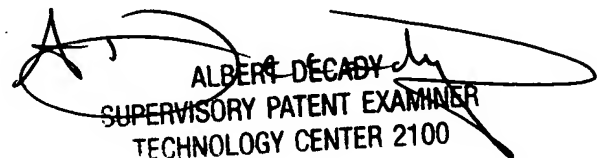
The examiner can normally be reached on Mon-Thur 9-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mujtaba Chaudry
Art Unit 2133
February 20, 2006



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